Indiana's Perchloroethylene Drycleaners

Featuring...

- ✓ Air (NESHAP) requirements
- ✓ Hazardous Waste requirements
- **✓** Clean Water Act requirements
- **✓** Spill Reporting requirements
- ✓ IOSHA rules
- **✓** Employee Training Requirements

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Disclaimer

Indiana's Perchloroethylene Drycleaners is published by IDEM. Every effort has been made to ensure the accuracy and completeness of the manual. However, IDEM makes no guarantee that the manual is completely free of errors or omissions. This manual is intended solely as general guidance.

It is ultimately the responsibility of the facility to ensure that it complies with all applicable regulations. Owners, operators, and other responsible parties at the facility may wish to seek advice about the circumstances of their facility from independent environmental professionals before making compliance decisions.

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Table of Contents

INTRODUCTION	4
Indiana Department of Environmental Management Office Listing	5
GLOSSARY	7
OVERVIEW	8
AIR (NESHAP) REQUIREMENTS	9
HAZARDOUS WASTE (RCRA) REQUIREMENTS	14
MANAGING YOUR SEPARATOR WATER	20
IN CASE OF A SPILL	21
WATER (CLEAN WATER ACT) REQUIREMENTS	24
OSHA (Workplace Safety) REQUIREMENTS	25
MISCELLANEOUS COMPLIANCE RESPONSIBILITIES	28
EMPLOYEE TRAINING REQUIREMENTS	29

INTRODUCTION

Protecting the health of Hoosiers and Indiana's environment is everyone's responsibility! This responsibility is especially important for those organizations that handle toxic chemicals in our communities. Because most drycleaners deal with Perchloroethylene also known as Tetrachloroethylene and Perc, a toxic chemical, they are often on the front line of caring for the environment. If handled properly, Perc can be used safely and minimize risk for everyone in Indiana. (http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=264&tid=48 – Toxic Substances Portal - Tetrachloroethylene)

IDEM is required to protect public health and the environment. It does this by developing and implementing effective regulations. It is up to those organizations to comply with the regulations. IDEM checks their compliance.

As IDEM strives to fulfill its role, the approach to environmental protection in recent years has fundamentally changed. As a complementing to the traditional use of command and control to protect the environment, new approaches in protection are being used. These include the use of education, partnerships and incentives.

Indiana's Perchloroethylene Drycleaners is a product of education and partnerships. The drycleaning industry was selected because it met the following criteria:

- There are too many businesses in the industry to effectively regulate with a traditional command and control regulatory approach.
- The industry uses a standard set of operations.
- The chemicals and pollutants from the industry are an environmental priority for IDEM, consistent with its strategic plan.
- A strong trade association to work with on the project.

There are about 350 drycleaning facilities in Indiana. Most drycleaners are small businesses located in residential neighborhoods. Most of them use Perc, which is an environmental priority chemical for US EPA and IDEM.

In addition to this manual, other resources for further assistance include the following:

- The CTAP drycleaner web site, http://www.in.gov/idem/ctap/2358.htm and
- Confidential phone assistance and confidential on-site assistance to drycleaners.

This manual focuses on compliance issues for Indiana's small drycleaners that use Perc. It is <u>not</u> intended for facilities using a petroleum solvent such as Stoddard; some of these solvents are combustible and present special hazards that are beyond the scope of this manual.

Indiana Department of Environmental Management Office Listing

Address for all IDEM offices: 100 N. Senate Avenue

Indianapolis, IN 46204-2251

Toll-free phone number for all offices: (800) 451-6027

IDEM home page is www.IN.gov/idem

If you have questions or need assistance on compliance issues, You may call the appropriate IDEM office.

NOTE: CTAP operates under a confidentiality mandate;

Other IDEM offices do not operate under this mandate.

Compliance & Technical Assistance Program (CTAP) Free, confidential compliance assistance (800) 988-7901 http://www.in.gov/idem/4108.htm

Other Sources of Information

Midwest Drycleaning & Laundry Association (Indiana & Kentucky) 651 NW 5th Street Richmond, IN 47374 (765) 939-6630 http://mwdla.com

Drycleaning & Laundry Institute 14700 Sweitzer Lane Laurel, MD 20707 (301) 622-1900 www.ifi.org

Division of Fire and Building Safety Indiana Government Center South 402 W. Washington St., Room E241 Indianapolis, IN 46204-2739 (317) 232-2222 http://www.in.gov/dhs/2412.htm

Boiler and Pressure Vessel Section Indiana Government Center South 402 W. Washington St., Room E241 Indianapolis, IN 46204-2739 (317) 232-1921 http://www.in.gov/dhs/2378.htm

Indiana Department of Labor
INSafe
402 West Washington Street
Indianapolis, IN 46204
(317) 232-2688
http://www.in.gov/dol/insafe.htm
Industrial Compliance Division (Safety & Industrial Hygiene)
http://www.in.gov/dol/industrialcompliance.htm

Center for Neighborhood Technology (CNT)
2125 West North Avenue
Chicago, IL 60647
(773) 278-4800 ext. 299
FAX (773) 278-3840
www.cnt.org/wetcleaning
CNT maintains information on wetcleaning and garment care.

U.S. EPA Region 7 Video Library Today's Wet Cleaning, CNT http://p2ric.org/p2information/Libraries/deta ils-videoclip.cfm?chapter_id=1 Online video course – 7 chapters

Publicly Owned Treatment Works (Wastewater treatment plant) Include local address and phone number below

GLOSSARY

Title V Air permitting program for major sources under the Clean Air Act (also referenced as

"Part 70")

CTAP Compliance and Technical Assistance Program (IDEM)

CESQG Conditionally Exempt Small Quantity Generator (hazardous waste rules)

DLI Drycleaning & Laundry Institute (formerly IFI)

IDEM Indiana Department of Environmental Management

INSafe Indiana Department of Labor outreach office for IOSHA compliance

IOSHA Indiana Occupational Health and Safety Administration

IFI International Fabricare Institute

LQG Large Quantity Generator (hazardous waste rules)

MSDS Material Safety Data Sheet

MWDLA Midwest Drycleaning & Laundry Association

NESHAP National Emissions Standards for Hazardous Air Pollutants

OSHA Occupational Safety and Health Administration (Federal level)

OAQ Office of Air Quality (IDEM)

OLO Office of Land Quality (IDEM)

OWQ Office of Water Quality (IDEM)

POTW Publicly Owned Treatment Works (wastewater treatment plant)

RCRA Resource Conservation and Recovery Act (enacted by the U. S. Congress) (solid and

hazardous waste rules came from this act)

SQG Small Quantity Generator (hazardous waste rules)

PCE Tetrachloroethylene or Perchloroethylene solvent

Perc Hydrocarbons in which all hydrogens are replaced by halogens are commonly called

perhaloalkanes or perhaloalkenes.

US EPA United States Environmental Protection Agency

OVERVIEW

This manual covers the environmental rules that govern most Perc drycleaners.

Throughout this manual, we provide Internet web site addresses to give you more information on a topic. If you do not have Internet access, call CTAP and we will mail you the information.

Under the air rules, most drycleaners are small or large area sources.

On December 19, 2005 U.S. EPA exempted area sources subject to the NESHAP from the obligation to obtain a Title V air permit unless, the source would be required to obtain these permits for another pollutant that exceeds the Title V thresholds. If you are a major source, you must have a Title V/Part 70 air permit. *These permitting requirements are not covered in this manual.*

Under the solid and hazardous waste rules, most drycleaners are either Conditionally Exempt Small Quantity Generators (CESQG) or Small Quantity Generators (SQG). If you are a Large Quantity Generator (LQG), you must comply with requirements that are not covered in this manual.

Most drycleaners generate certain amounts of separator water. Refer to sections in this manual regarding separator water and clean water act requirements concerning recommended management practices.

If you have a natural gas boiler and are unsure of your compliance responsibilities, contact the Boiler and Pressure Vessel Safety Division of the Office of the State Building Commissioner or visit their web site at http://www.in.gov/dhs/2378.htm

This manual does not include regulations associated with clothing that has wet blood or other wet bodily fluids (bloodborne pathogens). If you accept this type of garment, you must comply with OSHA Exposure Control Plan rules. A sample exposure control plan can be found at http://www.osha.gov/SLTC/etools/hospital/hazards/bbp/bbp.html#E

Format note:

"YOU MUST" - requirements of the rules

"YOU SHOULD" - recommendations or best management practices

"YOU COULD CONSIDER" - optional activities that may benefit your facility and/or the environment.

What Are The Potential Penalties For Noncompliance?

Both the owners and the managers of facilities are liable for all environmental violations that may occur. The owner of a facility has overall responsibility, but the manager is also responsible for the facility that he or she manages. If there is any intentional violation, or if the owner or manager knew about a violation, both may be criminally liable. If you voluntarily turn yourself in, most penalties are reduced.

If you violate any environmental statute or rule, you may be fined up to \$25,000 per day per violation.

AIR (NESHAP) REQUIREMENTS

The first thing you need to do is classify your facility for the national emissions standards for hazardous air pollutants (NESHAP). In order to classify your facility, you must know your largest purchase of Perchloroethylene solvent over any 12-month period. IDEM has created a form that you can use for this purpose. It is listed as the Perc Purchase 12-month Rolling Total Log and can be found at http://www.in.gov/idem/ctap/2358.htm. Your classification is determined by taking the highest total in your log.

TYPE OF MACHINE	SMALL AREA SOURCE	LARGE AREA SOURCE	MAJOR SOURCE (Title V/Part 70 Air Permit is required – call CTAP or OAQ for guidance)
Dry-to-Dry only	Less than 140 gallons of Perc/year	140-2100 gallons of Perc/year	More than 2100 gallons of Perc/year
Transfer only	Less than 200 gallons of Perc/year	200-1800 gallons of Perc/year	More than 1800 gallons of Perc/year
Both Dry-to-Dry and Transfer	Less than 140 gallons of Perc/year	140-1800 gallons of Perc/year	More than 1800 gallons of Perc/year

NOTE: A "year" is calculated on a 12-month rolling basis,

NOT a calendar-year basis

EXISTING SOURCE: machines installed before December 9, 1991 **NEW SOURCE:** machines installed on or after December 9, 1991

NOTE: According to US EPA guidance, you are allowed to occasionally go over your limit without affecting your source category. The overage must be temporary and must be related to an extraordinary occurrence. Visit http://www.epa.gov/ttn/oarpg/t3/memoranda/pceguid.pdf for the EPA memo related to this topic (beginning on p. 3). Call CTAP or OAQ for more guidance.

Major sources are subject to Title V/Part 70 permitting requirements in accordance with federal and state rules. Call CTAP or OAQ for more information on permitting for Perc drycleaners or visit http://www.in.gov/idem/4223.htm.

AIR (NESHAP) REQUIREMENTS continued

Your NESHAP classification is one of the following:

EXISTING SMALL AREA SOURCE

NEW SMALL AREA SOURCE

EXISTING LARGE AREA SOURCE

NEW LARGE AREA SOURCE

EXISTING MAJOR SOURCE

NEW MAJOR SOURCE

Remember your classification! Each one has different compliance responsibilities!

- If you move from small to large or from large to major, you must re-submit the IDEM Drycleaner Notification form. Go to http://www.in.gov/idem/ctap/2358.htm for the Drycleaner Notification form.
- If you go from small to large or from large to major, you must comply with the new requirements. If you are close to a limit, try to schedule your Perc deliveries in such a way that you are able to maintain your current classification.
- Moving, refurbishing, or buying a used machine can trigger new regulations. Call CTAP for more information on this part of the rule. Changes in ownership might trigger new regulations.

Note: If you are thinking about changing your facility related to your Perc drycleaning, please call CTAP or OAQ for information on the regulations.

• **NOTE:** Drycleaners that installed a new transfer system between December 9, 1991 and September 22, 1993 are treated differently than other drycleaners under the rule. If you installed a new transfer system between these dates, call CTAP for guidance.

Dry Cleaning NESHAP Compliance Summary

(Major Source requirements are not covered in this table.)

You must follow these requirements, depending on your classification:

(all records must be kept on site at each Perc cleaning facility)

Dry-to-dry refrigerated condenser requirements (transfer machines have different requirements; drycleaning systems which are located in a building with a residence also have different requirements - call CTAP for more information)	Existing small area source	New small area source	Existing large area source	New large area source
Notify IDEM within 30 days of opening a new Perc drycleaning facility or upon a change in classification. Certain changes also require notification. Visit http://www.in.gov/idem/ctap/2358.htm for notification form.	yes	yes	yes	yes
Install refrigerated condenser that does not release air- Perc vapor to the atmosphere while the drum is rotating. Air-Perc vapor must pass through the refrigerated condenser several times per operation.	no	yes	yes, unless existing carbon adsorber is in place	yes
Keep all drycleaning machine doors closed, except when loading and unloading.	yes	yes	yes	yes
Keep machine manuals on-site and operate machine according to manufacturer's instructions	yes	yes	yes	yes
Drain filters for a minimum of 24 hours in a closed container or housing to reclaim Perc before disposing of filters	yes	yes	yes	yes
New machines must be refrigerated dry-to-dry machines.	n/a	yes	n/a	yes
New machines must be refrigerated dry-to-dry machines and pass the air-Perc vapor from inside the drum through a non-vented carbon adsorber or equivalent control device.	n/a	n/a	n/a	yes, for each drycleaning system installed after Dec. 21, 2005
On the first business day of each month, record the amount of Perc purchased during the previous month and the total for the previous 12 months. For a form to help you with this activity, see http://www.in.gov/idem/ctap/2358.htm . Please keep the Perc receipts and the rolling total log together. Each entry in the log must have a receipt. Even if you do not purchase any Perc in a month, you must record zero gallons and calculate your rolling total.	yes	yes	yes	yes

Dry Cleaning NESHAP Compliance Summary

(Major Source requirements are not covered in this table.)

You must follow these requirements, depending on your classification:

(all records must be kept on site at each Perc cleaning facility)

Dry-to-dry refrigerated condenser requirements (transfer machines have different requirements; drycleaning systems which are located in a building with a residence also have different requirements - call CTAP for more information)	Existing small area source	New small area source	Existing large area source	New large area source
Keep all Perc and Perc wastes in closed, non-leaking containers. Containers for separator water may be uncovered, as necessary, for proper operation of the machine and still.	yes	yes	yes	yes
Maintain a log of vapor leak inspections including the name or location of drycleaning system components where leaks are detected and the dates of inspections. The log should include the dates of written or verbal orders for repairs and/or parts. It is permissible to use a halogenated hydrocarbon detector or a Perc gas analyzer to conduct weekly or biweekly inspections.	yes, biweekly	yes, biweely	yes, weekly	yes, weekly
Vapor leak inspections shall be conducted monthly while the component is in operation using a halogenated hydrocarbon analyzer or Perc gas analyzer.	starting July 28, 2008	starting July 27, 2006 for drycleaning systems installed on or after Dec. 21, 2005; otherwise, July 28, 2008	starting July 28, 2008	starting July 27, 2006 for drycleaning systems installed on or after Dec. 21, 2005; otherwise, July 28, 2008
The log should also include monitoring results and dates of monitoring. Monitoring will include the refrigeration system high and low pressure or if the machine is not equipped with refrigeration system pressure gauges, the temperature of the outlet side of the refrigerated condenser before the end of the drying cycle recorded weekly.	no	yes	yes	yes
If leaks are detected, they must be repaired within 24 hours, unless parts must be ordered. If parts must be ordered, they must be ordered within 2 working days and installed within 5 working days of receiving the parts.	yes	yes	yes	yes

Dry Cleaning NESHAP Compliance Summary

(Major Source requirements are not covered in this table.)

You must follow these requirements, depending on your classification:

(all records must be kept on site at each Perc cleaning facility)

Dry-to-dry refrigerated condenser requirements (transfer machines have different requirements; drycleaning systems which are located in a building with a residence also have different requirements - call CTAP for more information)		New small area source	Existing large area source	New large area source
If the temperature on the outlet side of the refrigerated condenser is greater than 45 °F, the machine must be repaired within 24 hours, unless parts must be ordered. If parts must be ordered, they must be ordered within 2 working days and installed within 5 working days of receiving the parts. Monitoring the refrigeration system high and low pressure during the drying phase to determine if it is within the range specified in the manufacturer's operating instructions is an option and an alternative to measuring temperature.	no	yes	yes	yes
Keep all records 5 years, including Perc purchase receipts.	yes	yes	yes	yes
Air drawn into the drycleaning machine when the door of the machine is open shall be prevented from passing through the refrigerated condenser.		yes	yes	yes

EXISTING SOURCE: machines installed before

December 9, 1991

NEW SOURCE: machines installed on or after December

9, 1991

HAZARDOUS WASTE (RCRA) REQUIREMENTS

For a Perc drycleaner, what is hazardous waste?

Any process materials that contain spent Perc solvent (and some other waste solvents such as spotting chemicals) are hazardous wastes, including:

- muck or still bottoms,
- filters of any kind,
- separator water
- wet or dry lint from button and lint traps and
- residue from spotting boards
- spent fluorescent light bulbs (most are hazardous because they contain mercury; however, you can choose to manage them as a universal waste if you do this, you do not have to count bulbs in your hazardous waste tracking.)

Hazardous waste generators are classified according to how much hazardous waste they generate in a calendar month. Your hazardous waste generator status will determine the rules you must follow to be in compliance with hazardous waste regulations.

GENERATOR STATUS	AMOUNT OF HAZARDOUS WASTE GENERATED	HAZARDOUS WASTE STORAGE LIMITS
Conditionally Exempt Small Quantity Generator (CESQG)	Less than or equal to 220 pounds per month (approximately one half of a 55 gallon drum)	Maximum accumulation of 2,200 pounds (approximately four 55 gallon drums). No time limit
Small Quantity Generator (SQG)	Between 220 and 2200 pounds per month (approximately one half to four 55 gallon drums)	Maximum accumulation of 13,380 pounds (approximately thirty 55 gallon drums) and maximum storage time of 180 days
Large Quantity Generator (LQG)	2200 pounds or more per month (more than four 55 gallon drums)	Maximum storage time of 90 days

Unlike the Perc purchase 12-month rolling total log for the Perc Dry Cleaning NESHAP rule, the hazardous waste cutoffs are based on a calendar month, not a 12 month rolling total.

If you generate enough hazardous waste in one month to move to the next classification, you must comply with the stricter standards of the larger classification.

The cutoffs are based on the quantity of hazardous waste you generate, not the amount you ship.

Note: A garment cleaned with Perc is not a hazardous waste. A hazardous waste must be solid waste first in order to be a hazardous waste. Since you do not intend to discard the garment, the garment is not a solid waste and it cannot be a hazardous waste.

IF YOU ARE A SQG, YOU MUST:

Identify and quantify your hazardous waste generated per month. Maintain records of the quantity generated each month. Visit http://www.in.gov/idem/ctap/2358.htm for a hazardous waste tracking log form.				
NOT store more than 13,228 pounds of hazardous waste at any one time AND not exceed the maximum storage time of 180 days (270 days if your hazardous waste is transported more than 200 miles).				
Designate an emergency coordinator for your facility. This person must be on site at all times or be available to respond to an emergency within a short period of time.				
Make sure you are using a valid US EPA I.D. number for shipping purposes. This number is managed by IDEM's Office of Land Quality (OLQ). To obtain an EPA ID number, contact OLQ at (317) 233-0066, or via e-mail at oldregulatoryreporting@idem.IN.gov or visit http://www.in.gov/idem/5029.htm				
Use a registered hazardous waste transporter with a valid US EPA I.D. number.				
Manifest each shipment of hazardous waste using EPA Form 8700-22, Uniform Hazardous Waste Manifest or, manifest each shipment using the destination state's manifest, if require by the destination state. Most hazardous waste haulers will help you with the manifesting requirements for your waste.				
Ensure that your hazardous waste is delivered to a properly permitted treatment, storage, disposal or recycling facility				
Ensure that hazardous waste markings, which must be attached to all hazardous waste storag containers, include the following information:				
• The words "HAZARDOUS WASTE"				
• Proper DOT shipping name - "RQ, Waste Tetrachloroethylene, 6.1, UN1897, PG-III (EPA F002, D039)"				
• Name and address of your plant (generator of the hazardous waste)				
US EPA ID number and EPA Waste number				
• Accumulation start date (the date you first put waste in that container)				
• Manifest document number (when the manifest is filled out)				
Store wastes in containers made of materials compatible with the waste.				
Keep all containers of hazardous waste closed, except when adding or removing material.				
Inspect hazardous waste containers every week for evidence of leaks or deterioration. Replace bad containers with new ones.				
Ensure that hazardous waste stickers are in good condition; replace worn stickers.				

IF	YOU	ARE	A	SQG	(continued)
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IF	YOU ARE A SQG (continued)			
	Maintain your hazardous waste storage area; it must have:			
	• alarm or voice signal to provide emergency instructions.			
	• telephone nearby to call emergency personnel emergency numbers posted near the telephone.			
	 adequate fire extinguishing equipment nearby. 			
	• spill control equipment nearby.			
	• water & hoses, foam equipment or automatic sprinklers.			
	• sufficient aisle space to allow full inspection of each container.			
	Submit the Annual Manifest Summary Report each year by March 1. This report summarizes your hazardous waste shipment activities for the previous year. Visit the IDEM web site at http://www.in.gov/idem/5038.htm for reporting forms.			
IF	YOU ARE A CESQG, YOU MUST			
	Identify and quantify your hazardous waste generated per month. Maintain records of the quantity generated each month. Visit http://www.in.gov/idem/ctap/2358.htm for a hazardous waste tracking log form.			
	Generate less than 220 pounds of hazardous waste each month.			
	NOT store more than 2,200 pounds of hazardous waste at any one time.			
	Ensure delivery of waste to a permitted municipal solid waste facility or properly permitted hazardous waste treatment, storage and disposal facility.			
	Properly manifest shipments of hazardous waste, if the destination state requires it. Most haulers will help you with this requirement.			

BOTH CESQGs and SQGs SHOULD

Keep all hazardous waste away from foodstuffs.	/8
Keep the "HARMFUL STOW AWAY FROM FOODSTUFFS" label on all your hazardous waste containers to protect yourself. It is your responsibility, not the hauler's, to make sure your containers are labeled, packaged and marked properly during generation and transportation.	HARR STOW FR FR FR FR FR FR FR FR FR FR FR FR FR
Choose a hazardous waste hauler that has liability insurance for accidents that o transportation.	ccur dur

BOTH CESQGs and SQGs SHOULD (continued)

Investigate the ultimate disposition of the waste. You should know if the waste will be landfilled, treated, incinerated or what other final disposal method will be used.
Properly recycle all metal parts that have come in contact with Perc. Most scrap yards accept steel, aluminum, copper, brass, etc.

NOTE: Legally, CESQGs are permitted to dispose of hazardous waste in a properly permitted municipal solid waste facility. However, IDEM strongly recommends that you do not put hazardous waste in the regular trash, because:

- 1. Even though you throw it in the trash, you are still responsible for it; if Perc ends up in the groundwater, you could be forced to clean it up;
- 2. If your dumpster or trash cans leak, Perc could come in contact with the soil;
- 3. If you throw hazardous waste in the trash, you may not know where it ultimately will end up; and
- 4. There are health hazards associated with Perc, and you do not want to harm anyone in your community. Children often play around dumpsters.

CESQG vs **SQG**

BASIC REQUIREMENTS - COMPARISON CHART

Note: there are additional requirements for SQGs that store Hazardous Waste in tanks. Call CTAP or OLQ for assistance.

CESQG	SQG
Identify and quantify your hazardous waste generated per	Generate between 220 lbs. And 2,200 lbs. of hazardous waste per calendar month.
month. Maintain records of the quantity generated each month. See http://www.in.gov/idem/ctap/2358. htm for a hazardous waste tracking	Identify and quantify your hazardous waste generated per month. Maintain records of the quantity generated each month.
log form.	Store no more than 13,228 lbs. of hazardous waste at any one time AND not exceed the maximum storage time of
Generate less than 220 lbs. of hazardous waste per calendar month.	180 days (270 days if your hazardous waste is transported more than 200 miles).
Store no more than 2,200 lbs. of	Designate an emergency coordinator.
hazardous waste at any one time.	Obtain a US EPA I.D. number.
Ensure delivery of waste to a permitted municipal solid waste disposal facility or permitted hazardous waste treatment storage and disposal facility.	Manifest each shipment of hazardous waste using EPA Form 8700-22, Uniform Hazardous Waste Manifest or, manifest each shipment using the destination state's manifest, if so required by the destination state. Most hazardous waste haulers will help you with the manifesting requirements.
Properly manifest shipments of hazardous waste, if the destination	Keep manifest copies 3 years.
state requires it. Most haulers will help you with this requirement.	Use a registered hazardous waste transporter with a US EPA ID number.
	Properly manage your hazardous waste (i.e., by ensuring delivery to a treatment, storage, disposal or recycling facility)
	Submit the Annual Manifest Summary Report each year by March 1 of the following year. This report summarizes your shipment activities for the previous year. Visit the IDEM web site at http://www.in.gov/idem/5038.htm for reporting forms.

CESQG vs SQG

BASIC REQUIREMENTS - COMPARISON CHART

(continued)

Use proper container management practices:

- mark containers with the words "Hazardous Waste" as soon as you put waste into container.
- mark each container with the first date that you put waste into container (accumulation start date) or the date when container was taken to storage, if satellite accumulation is used.
- add flammable label, if applicable, when you first put waste in container.
- store wastes in containers made of materials compatible with the waste.
- keep all containers of hazardous waste closed, except when adding or removing material.
- inspect containers weekly.
- make sure containers are always in good condition; replace if necessary.

Hazardous Waste storage area must have:

- alarm or voice signal to provide emergency instructions.
- telephone nearby to call emergency personnel.
- emergency numbers posted near the telephone.
- fire extinguishers nearby.
- spill control equipment nearby.
- water & hoses, foam equipment or automatic sprinklers.
- sufficient aisle space to allow full inspection of each container.

MANAGING YOUR SEPARATOR WATER

Hazardous Waste Rules

Because it contains Perc, separator water from your Perc drycleaning machine is considered a hazardous waste under the hazardous waste rules and it is also a Perc waste in the NESHAP air rule.

The following two options are recommended for managing separator water:

- Follow hazardous waste generator standards and send the separator water off site, using your hazardous waste hauler for proper treatment/disposal.
 - If you collect the water for treatment/disposal, you must keep the separator water in closed, non-leaking containers at all times. You must not simply put the hose in a bucket. The container must have a tight-fitting lid and the hose must fit tightly through the lid.
 - Ensure there are no leaks in the plumbing if you hard-plumb the water to another location.
- Follow hazardous waste generator standards and, under certain conditions, evaporate the separator water on site. See IDEM non-rule policy document titled "Regulatory Status of Hazardous Waste Evaporators" at http://www.in.gov/idem/files/nrpd_waste-0045.pdf

NOTES: If you are a Small Quantity Generator (SQG) of hazardous waste and you are piping the water directly to an evaporator, the evaporator must be equipped with a means to stop the inflow (waste feed cutoff system or bypass system to a stand-by tank).

NOTE: These systems are to be used in the event of a leak or overflow from the tank due to a system failure (a malfunction in the treatment process, a crack in the tank, etc).

You must NOT use a hot plate, five-gallon bucket, aquarium aerator or other home-made device that does not qualify as a separator water evaporator.

IN CASE OF A SPILL

What is a Reportable Spill?

For an Indiana Perc drycleaner, a reportable spill is a release of more than one pint or one pound of an objectionable substance (such as Perc or almost any cleaning chemical) that could threaten to enter the ground water or surface water of the State of Indiana. Because most chemicals in your facility could cause damage to the waters of Indiana and/or human health, we recommend following the spill rule for all chemicals in your plant. Information about IDEM's Emergency Response program and the Indiana Spill Rule can be found at http://www.in.gov/idem/4155.htm

NOTE: If you have a spill inside your facility and it did not enter any soils or groundwater and you clean it up and the material does not leave your property, you do not have to report the spill to the State.

If you are in doubt about whether you should report a spill or not, you can report the spill. Failure to report a reportable spill is a violation of the rules; reporting a spill that did not have to be reported is not a violation of the rules.

Not all spills are reportable. Whether or not a spill must be reported depends on several factors. As a general rule, all spills should be reported unless they:

- do not create a risk to public health from fire or explosion.
- are contained within a building.
- do not come in contact with soil or water.
- do not leave your property and do not threaten to enter the waters of Indiana (including ground water). You may clean up the spill and are not required to report it to IDEM.

As you can see, determining when to report a spill is a complicated task. You may obtain additional information by calling IDEM's 24-Hour Spill Reporting Line at (317) 233-7745 or toll free at (888) 233-7745. An IDEM staff member will assist you in determining whether or not you have a reportable spill and, if your spill is reportable, will also assist you in determining which additional entities you must contact to report the spill. The Spill Reporting staff does not provide confidential assistance. If you want confidential assistance on the Spill Rule, call CTAP.

A sample Emergency Notification List is located at http://www.in.gov/idem/ctap/2358.htm. You should complete this form and place a copy of it near each of your phones.

It is not illegal to have a spill, but it is illegal to fail to report it and clean it up.

IDEM's 24-HOUR SPILL REPORTING LINE
(317) 233-7745 or
TOLL FREE (888) 233-7745

IF YOU HAVE A SPILL, YOU MUST:

- 1. Notify your local fire department if it creates a risk to public health from fire or explosion.
- 2. If appropriate, turn on the ventilation systems to vent the vapors out of the building.
- 3. Alert others and call for help.
- 4. If the spilled material is not flammable, set the containers upright and shut off the valves that released the material. If the container is damaged, place it in a compatible secondary container (e.g. bucket or overpack drum.)
- 5. Place a spill tube/sock around your drain to prevent spill material from entering the drain.
- 6. If applicable, have properly trained personnel put on personal protective equipment (apron, gloves), while cleaning up the material. **Note:** If you have respirators, you are responsible for establishing a respirator program which includes medical monitoring, training, and planning. Therefore, if you do not stay abreast of the OSHA guidelines, you should not have respirators in your facility. Respirator programs are outside the scope of the manual. Call CTAP if you have questions regarding respirators.
- 7. Clean up the spill, using appropriate methods, including:
 - using comforters or towels; you can then reclaim the Perc in your drycleaning machine;
 - cleaning up the spill with a rag; or
 - spreading an absorbent material;
- 8. If you must leave the building because of exposure symptoms from the spilled material, **do not** reenter the building to clean up the spill unless you are OSHA-trained to assist at a hazardous substance release incident (contact INSafe or CTAP for more information on training requirements.) If you do not have this type of OSHA training, contact your local fire department or an environmental contractor.
- 9. Pack and label the spill material in a compatible container that meets IDEM, DOT and the Indiana Department of Fire & Building Services' regulations, including selecting the appropriate container and properly labeling it.
- 10. Make a hazardous waste determination on the spill material and manage accordingly.
- 11. Report your spill (if it is a reportable spill) to:
 - IDEM's 24-Hour Spill Reporting Line as soon as possible (the rule requires within 2 hours of your knowledge of the spill) by calling (317) 233-7745 or toll free (888) 233-7745. The Spill Line is staffed 24-hours a day, 7-days a week.
 - Don't wait to report your spill. Call the Spill Hotline even if you are not sure if you have a reportable spill. Spill Hotline staff often request information; please cooperate with spill response staff.
 - The downstream users of a spill to the waterway. When you report the spill, IDEM will assist you in notifying downstream users; however, it remains your responsibility to notify downstream users of potentially contaminated water.
 - Your wastewater treatment plant, if the spill was into a sanitary sewer.

IF YOU HAVE A SPILL, YOU SHOULD

 Put clean-up materials contaminated with Perc such as towels in your drycleaning machine to reclaim the Perc.

YOU SHOULD

- To help reduce spills during Perc delivery, consider installing a closed delivery system such as is offered by most drycleaning distributors. The CAREfillJ system is from Vulcan Chemicals Company. This technology virtually eliminates any chance of spills associated with Perc deliveries. Ask your Perc suppliers about this system.
- Absorb small spills with rags or other material, and put them in your machine to reclaim the Perc.
- Store all containers in areas where no floor drains are present to reduce the likelihood of a release to sewer or groundwater
- Place absorbent booms around floor drains.

YOU COULD CONSIDER

- Installing a spill containment pan or system when purchasing or moving a machine
- Patching any cracks in your floor and painting it with a resistant paint to help prevent Perc solvent from entering the soil, and contaminating the groundwater
- Filling inside storm sewer drains with concrete, to eliminate the possibility of a spill to the outside from your facility.

It is very difficult and costly to get Perc and other chemicals out of the soil and groundwater, so it is in your best interest to minimize the risk of a spill from your facility.

WATER (CLEAN WATER ACT) REQUIREMENTS

- 1. Your local wastewater authority may require you to obtain a permit for your wastewater discharges. Check with your local authorities for local requirements.
- 2. With reports of ground water and soil contamination increasing throughout the country, the International Fabricare Institute (Drycleaning & Laundry Institute) strongly recommends that separator water be transported offsite or managed using an evaporator. You must NEVER discharge the water to a storm sewer, dry well, septic system or on the ground. If you do, you may be causing a spill.
- 3. If your facility is in a wellhead protection area, you may have more requirements under local laws. Check with your drinking water utility to verify your status under the wellhead protection program.
- 4. Make sure your facility has an air gap or reduced pressure principle backflow preventer installed on your public water supply line. The reduced pressure principle backflow preventer must be inspected at least every six months. Your water utility may be able to help you with this requirement. The state rule can be found at 327 IAC 8-10, dealing with cross-connections in public water supply pipelines. Access 327 IAC 8-10 via http://www.in.gov/legislative/iac. Scroll down the list of titles to Title 327, Water Pollution Control Board, and then click on the link. Proceed to Article 8, Public Water Supply and click either the PDF or WordPerfect links. The file will open allowing you to scroll to Rule 10, Cross Connections; Control; Operation.
- 5. Call CTAP, your local wastewater treatment plant or your public water supply for more information.

OSHA (Workplace Safety) REQUIREMENTS

- 1. Maintain compliance with the Hazard Communication Standard (Workers Right-to-Know Law) by:
 - Listing all chemicals at the facility (see http://www.in.gov/idem/ctap/2358.htm under "OSHA");
 - Developing a written hazard communication program (visit http://www.in.gov/idem/ctap/2358.htm for a sample hazard communication program there are also sample plans on the OSHA site at http://www.osha.gov/ and http://www.osha.gov/dsg/hazcom/index.html);
 - Ensuring that all chemicals used in the workplace are properly labeled; if you receive a chemical that is not properly labeled, call your supplier and insist on compliance with the regulation;
 - Maintaining an updated inventory of material safety data sheets (MSDS) FOR ALL
 CHEMICALS in the workplace; if you receive a chemical without an MSDS, write to
 the supplier to request one or call the toll-free number on the product package if there is
 one;
 - Providing information and training for employees on hazardous chemicals found in the workplace so that they are aware of the chemical hazards, can read a MSDS, and know what to do in an emergency.
 - Keep all MSDSs for 30 years. You can keep an archive binder of old MSDSs for chemicals that you no longer use. Alternatively, you can keep a record of the identity of the substance (chemical), where it was used and when it was used.
 - Training all new employees immediately. If you introduce a new chemical and/or hazard into your workplace, you must train all employees on this new item.
- 2. Develop a written Emergency Action Plan, including Fire Prevention. Visit http://www.in.gov/idem/ctap/2358.htm or http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=972_6 for examples of emergency action plans. **NOTE:** If you have 10 or fewer employees, this plan may be communicated verbally. The plan must address natural disasters and man-made emergencies such as robbery attempts. You must train all new employees immediately and whenever an employee's responsibilities change.
- 3. Display the IOSHA SAFETY AND HEALTH PROTECTION ON THE JOB poster in a place that your employees can easily read it at all times. This rule is for <u>all</u> facilities, no matter how many employees you have. Call Indiana Department of Labor IOSHA Compliance at (317) 232-6942; they will mail this poster to you for free.
- 4. Injury Recordkeeping Visit http://www.osha.gov/ for current information. see Chapter 2 of OSHA's Recordkeeping Policies and Procedures Manual, available at http://www.osha.gov/ pls/oshaweb/owadisp.show document?p_table=DIRECTIVES&p_id=3205
 - Drycleaners with more than 10 employees must comply with OSHA work-related injury recordkeeping requirements 300, 301 and 300A forms.

OSHA (Workplace Safety) REQUIREMENTS (continued)

- Drycleaners with 10 or fewer employees get a partial exemption from injury recordkeeping requirements.
- The 300A form must be posted in each workplace from 2/1 4/30 of each year to report what happened the previous year. If you had no reportable injuries, you must post the form filled out with zeros and the appropriate signature.
- You must train your employees on how to report a work-related injury or illness.

It is important for you to count your employees for compliance requirements. Count everyone in the entire company, not just each facility or store. Full-time, part-time, and seasonal employees count toward your total number of employees. Example: If you have 5 full-time employees, 4 part-time employees, and 3 seasonal employees - you have 12 employees for OSHA purposes. You must look at how many employees are working for you at any one time - do not count employees that no longer work for you.

- 5. Properly store and label all containers of chemicals, including Perc and spotting chemicals. Keep all containers closed when not using them. Make sure all containers are labeled with the name of the chemical, target organ and hazard warning. The target organ is the first organ identified in the material safety data sheet (MSDS) under the harmful effects section. Each chemical must have a corresponding MSDS and be covered in your hazard communication program.
- 6. Establish a lockout/tagout program. For everything that is **NOT** routine, repetitive, and integral to the use of the equipment for production, a **lockout/tagout procedure** must be in place. This requirement includes replacing belts on equipment, separating safety devices from the finishing unit, or removing access panels. If you contract out all major maintenance tasks, you do not require a lockout/tagout program, but all employees must know that they are to stay away from machines that are not working properly.

NOTE: If you have no employees exposed then there is no official need for a lockout program. However, you must have something in writing so as to require any contractor who performs maintenance on machines to have and comply with a lockout program. You must also train your employees to recognize the locks relating to lockout and be aware of the absolute prohibition against removing a lockout lock. If your employees work with the contractors then you must have a program so that your employees are aware of the requirement that anyone who works on the equipment has to put his own lock on.

- 7. Make sure all ventilation fans have proper guarding in place to protect employees' fingers and hands.
- 8. If you have respirators, establish a written respirator plan including medical monitoring, training and planning. Visit http://www.osha.gov/ for more information on respirator requirements. **Note:** if you think you need to use respirators, consider reducing the amount of Perc vapors and/or increasing the air low through your facility to keep the air fresh.
- 9. Keep all chemicals in closed, non-leaking containers, including drums and bottles with lids.
- 10. If a work-related accident causes three or more employees go to the hospital and spend the night, or there is a work-related fatality, you must report this accident to IOSHA within 8 hours

OSHA (Workplace Safety) REQUIREMENTS (continued)

of your knowledge of the hospitalization or fatality. The accident must be called in to IOSHA at 317/232-2693, 24-hours per day, 7-days per week. You must provide this information when you call: name of business, location of incident, time of incident, number of hospitalized employees or fatalities, contact person, phone number, and brief description of accident.

Be sure to leave your name and phone number.

MISCELLANEOUS COMPLIANCE RESPONSIBILITIES

YOU MUST

	Make sure your refrigeration technicians follow all regulations related to the refrigerants you use in your drycleaning machines and other systems in your facility. Usually, this means all refrigerants must be re-claimed and/or recycled. Most refrigerants must not be vented off into the atmosphere.		
	Have adequate electrical outlets; extension cords are for temporary use only.		
YOU SHOULD			
	Properly maintain portable fire extinguishers, and train employees annually on the proper use of them. If employees are required to fight large fires, special training is required. If you do not provide training for fire fighting, you must not allow your employees to fight fires.		
	Provide adequate aisle space for access to materials and equipment.		
	Become familiar with your facility's plumbing system, especially the locations and destinations of all drains, sinks, and other liquid plumbing devices such as sump pumps.		
	Know the final destination of all drains and sewers. If you have a spill, it is important that you know where the spilled substance will go.		
	Periodically check building ventilation to avoid buildup of Perc vapors.		
	Make sure your facility has adequate electrical outlets. Extension cords are to be used for temporary use only.		

SARA TITLE III REPORTING

The federal Superfund Amendments and Reauthorization Act (SARA) became law in 1986. Title III of these SARA provisions is also known as the Emergency Planning and Community Right-to-Know Act (EPCRA).

If you have more than 735 gallons (10,000 pounds) of Perc at your facility at any one time, you must complete a Tier II report under SARA Title III. This report is due March 1 each year. Visit http://www.in.gov/idem/5285.htm#tier2reqs for more information. You must pay a fee with this report.

YOU COULD CONSIDER

☐ Monitoring the air in your plant on a regular basis to ensure worker safety. Air monitoring badges are available from IFI and other sources. 100 parts per million (PPM) is OSHA's time-weighted average exposure limit for Perc. This is measured with a time-weighted average (TWA), meaning that the average for the 8-hour period can be no more than 100 PPM. OSHA may be revising this standard. It is in your best interest to know where you are in your plant with respect to air quality. The acceptable ceiling concentration is 200 PPM for 5 minutes in any three hour period, not to exceed a maximum peak of 300 PPM.

EMPLOYEE TRAINING REQUIREMENTS

YOU MUST ☐ Train all new employees immediately. ☐ Test (DOT) all employees and make sure they score 80%, or review missed questions with trainer, and display competency in area of responsibility. If an employee changes job functions, training in new area must occur within 90 days of job change. ☐ Conduct OSHA Hazard Communication training each year for all employees. YOU SHOULD ☐ Conduct all training annually for all employees ☐ Make sure all employees sign something that says they understand the training received. We have separated your training responsibilities into 3 groups. You do not have to use this scheme - you can design your own training program. 1. Front desk employees and other employees that do not have contact with chemicals or cleaning machine. ☐ Basic Hazard Communication (OSHA) Material Safety Data Sheet (MSDS) Book. Make sure that all employees know where MSDS book is. Make sure they do not touch chemicals or their containers - i.e. drums, lifting lids, etc. > If they spill anything, or if they hear or smell anything unusual, they must go get help. Tell them to document when a spill, sound, or smell occurred, circumstances, etc. If they smell natural gas (usually a rotten egg smell), leave and call for help. > Tell them to stay away from drycleaning machine. > Tell them not to use extension cords for more than an hour. Extension cords must not lay free across an aisle. > Tell them to use ladders, NOT chairs, to reach things. ☐ Unless you have an Exposure Control Plan, tell them not to accept garments with wet blood and/or bodily fluids. (Call CTAP or INSafe for more information). ☐ Make sure they understand your lockout/tagout procedure. If something is broken electrically or locked/tagged out, tell them not to touch it. \square Make sure they know what to do in case of fire. \Box Tell them not to fight fire alone. □ Tell them to get out of the building in the event of a large fire or fire alarm, if they are not

trained to fight a large fire.

EMPLOYEE TRAINING (continued)

Training).

2. Pressers, hangers, assemblers, baggers, seamstresses and others who do not operate drycleaning machine ☐ Basic Hazard Communication (OSHA) Make sure that all employees know where Material Safety Data Sheet (MSDS) book is; o Show entire list of chemicals in MSDS Book; o Have employees look up a few MSDSs - include Perc & something else o Review the MSDS for Perc and the other chosen chemical MSDS with them; Review every chemical with employees - read every label to them; ➤ Tell employees about Hazard Communication Standard; > Show them Hazard Communication Program and make sure that all employees know where it is located; ➤ Show employees proper places to store chemicals; > Train them on your spill procedures; If they smell natural gas (usually a rotten egg smell), leave and call for help; > Tell them to stay away from drycleaning machine; Tell them not to use extension cords for more than an hour. Don't have the cords laying free across an aisle. > Tell them to use ladders, NOT chairs, to reach things. ☐ Tell them not to accept garments with wet blood/bodily fluids unless you have appropriate OSHA plans in place. ☐ If a respirator is present at your facility, tell them <u>not</u> to use it under any circumstances, unless they are properly trained. ☐ Explain lockout/tagout procedure. If something is broken or locked/tagged out, tell them not to touch it. ☐ Train them how to use fire extinguishers and document the training. > Tell them only to use fire extinguishers for very small fires and not to fight these small fires alone. □ Tell them to get out of the building in the event of a larger fire or if the fire alarm is activated, unless they are trained to fight large fires.

Note: We do not recommend you allow these employees to sign manifests; you should try to arrange for your hauler to pick up while you are there.

If you want them to sign hazardous waste manifests, train them on signing manifests,

required elements of the manifest form (make sure the manifest matches the container label), and the legal responsibilities associated with signing the manifest (See # 1, 2 and 3 of DOT

EMPLOYEE TRAINING (continued)

3.	Drycleaning Machine Operators, Managers, and Owners		
	Hazard Communication (OSHA)		
	>	Be familiar with entire list of chemicals in your facility; each chemical must have an MSDS;	
	>	Know how to determine chemical hazards;	
	>	Have thorough knowledge of the Hazard Communication Standard and your Hazard Communication Program, and know where your program is located at all times;	
	>	Know how to read chemical labels, so that you can refuse a shipment that is incorrectly labeled;	
	>	Determine proper places to store chemicals;	
	>	Know what do to if there is a spill;	
		Know what to do if there is a natural gas leak;	
	>	Do not put your head in drycleaning machine;	
	>	Do not run extensions cords across walkways;	
		Use ladders, NOT chairs, to reach things;	
	Unless you have proper programs in place, do not accept garments with wet blood/bodily fluids.		
	If you have respirators, you are responsible for establishing a respirator program including medical monitoring, training, and planning.		
	Note: If you do not stay up with these OSHA guidelines, you should not have respirators in your facility; if you do not stay up on this training, a properly trained contractor must do the maintenance work that may require respirators.		
	Tra	Train contractors on all hazards in the workplace.	
	Know and be able to communicate lockout/tagout procedures.		
	Do not touch anything that is broken electrically or locked/tagged out.		
	Be familiar with fire extinguisher label and use.		
	Do not fight fire alone.		
	Know and be able to communicate emergency response and evacuation procedures		

EMPLOYEE TRAINING (continued)

Department of Transportation (DOT) training:

- ☐ Employees who do not sign manifests or handle waste Perc in any way do not need DOT training.
- ☐ Training must be done within 90 days of employment and before unsupervised work begins.

DOT training topics:

1. General Awareness Training

Addressed by Hazard Communication training.

2. Function Specific Training

Employee needs to be able to demonstrate that the employee can:

- > Select the proper container. A steel or plastic drum with a removable lid is adequate. Container must be in good condition.
- Close the container for transport. Do not forget to put the gasket and trim ring on.
- Label and mark containers. Use a proper HAZARDOUS WASTE marking and the HARMFUL: STOW AWAY FROM FOODSTUFFS label.



- ➤ Properly complete a hazardous waste manifest; and
- ➤ Load containers onto the truck.
- 3. Safety Training

Addressed by Hazard Communication training